

(For USFWS Use Only)
FWS Agreement #113320J019
Charge Code: 11332-1933-FR01
Amount Obligated: \$90,000.00
Tax Identification No.: 94-2987019

I. TYPE OF AGREEMENT:

☒ Grant
☐ Cooperative Agreement
☐ Private Lands
☐ Challenge Cost-Share
☐ Inter-Agency
☐ Intra-Agency

II. TYPE OF ORGANIZATION:

☐ State, Local or Indian Government
☒ Non-Profit Organization
☐ Higher Education Inst.
☐ Private Individual
☐ Business Organization
☐ Federal Agency

III. PARTICIPANTS

Funding Organization:

U.S. Fish and Wildlife Service
Anadromous Fish Restoration Program
Sacramento-San Joaquin Estuary
Fishery Resource Office
4001 North Wilson Way
Stockton, California 95205-2486

Cooperator's Organization:

Fishery Foundation of California
P. O. Box 271114
Concord, CA 94527

IV. PROJECT MANAGERS:

USFWS Manager:

Erwin Van Nieuwenhuyse
Fishery Biologist
(209) 946-6400
email: evannieu@delta.dfg.ca.gov

Cooperator:

Patricia Duran, Director
Fisheries Foundation of California
(925) 944-9115/fax 944-3514
email: pduran@tip.net

V. PURPOSE/OBJECTIVE:

Improve fish passage on the Cosumnes River.

VI. AUTHORITY:

P.L. 97-258 Federal Grant and Cooperative Agreement Act of 1997,
31 USC 6301-6308

P.L. 85-624, Fish and Wildlife Coordination Act,
16 USC 661

P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act

VII. SERVICE FUNDING INFORMATION:

- A. Funds in the total amount of \$90,000.00 are hereby obligated by the U.S. Fish and Wildlife Service (*Service*) to reimburse the *Cooperator* for the work performed pursuant to this agreement to support the accomplishments of this project.
- B. Nothing herein shall be considered as obligating the *Service* to expend funds or otherwise obligate the *Service* for the future payment of money in excess of appropriations authorized by law and administratively allocated for the activities associated with this agreement.

VIII. TERM OF AGREEMENT:

This Agreement will become effective upon being signed by both parties and will remain in effect through September 30, 2003.

IX. BACKGROUND INFORMATION:

- A. *The Central Valley Project Improvement Act (CVPIA; Title 34 of Public Law 102-575, Section 3406(b)(1))*, authorizes and directs the Secretary of the Department of the Interior (Interior), in consultation with other State and Federal agencies, Indian tribes, and affected interests, to develop and implement a program which makes all reasonable efforts to at least double natural production of anadromous fish in Central Valley rivers and streams. Further, the *CVPIA* requires that this program give first priority to measures which protect and restore natural channel and riparian habitat values through habitat restoration actions, modifications to Central Valley Project operations, and implementation of the supporting measures mandated by the *CVPIA*. The Interior, is approaching implementation of this directive through development of an *Anadromous Fish Restoration Program (AFRP)*. The species and races of anadromous fish addressed by the *AFRP* include fall-run, late-fall-run, winter-run, and spring-run chinook salmon; steelhead; striped bass; American shad; white sturgeon; and green sturgeon.
- B. The *Service* and the *Bureau of Reclamation (Bureau)* are the Interior agencies responsible

for implementing the *CVPIA*. They are jointly and cooperatively implementing the *CVPIA*, with the *Service* assuming lead responsibility for the *AFRP*.

- C. The *CVPIA* also establishes a Restoration Fund of up to \$50 million annually to assist in implementation of the fish and wildlife restoration provisions. Of this sum, Interior allocates 6 to 11 million dollars annually to the *AFRP*. The *AFRP* then leverages these funds with other funds provided by partners to total from 12 to 20 million dollars annually invested in restoration projects.
- D. The project will modify the existing fish ladders at Granlees Diversion Dam to bring them up to current California Department of Fish & Game (CDFG) hydraulic criteria for fish passage and significantly increase their durability so that they can withstand a wide range of hydrologic conditions. The summer dams will be retrofitted with low-flow passage structures to allow for fish passage over a greater range of flows. These actions will greatly improve fish passage on the Cosumnes River and thus promote the recovery of sustained runs of fall-run chinook in the watershed.
- E. The project will provide multiple benefits to chinook salmon including a reduction in migration delays, reduced predation, enhanced spawning success, and will provide further habitat and population diversity to a depleted salmon resource, incrementally benefitting chinook salmon throughout the Sacramento-San Joaquin system.

X. SPECIFIC OBLIGATIONS OF EACH PARTY:

A. THE *COOPERATOR* SHALL:

- 1. Furnish the necessary personnel, materials and services required to accomplish the project described in Attachment A (Scope of Work), dated March 22, 2000.
- 2. Ensure that the *Service* receive appropriate credit for projects funded or otherwise supported by the *Service* and their partners in any signage, public presentations, and newsletters and any other publications that describe the project or assign credit for the project to the *Cooperator* or, if any, other partners that funded or otherwise supported the project.
- 3. Ensure that the project complies with all applicable Federal, State and local environmental laws and regulations. The *Cooperator* is responsible for obtaining all applicable Federal, State and local permits for work to be performed under this Agreement.
- 4. Upon request of the *Service*, make oral presentations at annual review meetings. The purpose of the meeting(s) will be to effectively monitor the progress and

utility of the project(s), and to share information among all interested parties, and, if applicable, any other cooperative recipients. In addition, the *Cooperator* may be asked to informally present his progress to the *Service*.

B. THE *SERVICE* SHALL:

1. Act as the Federal liaison in the conveyance of funding, to the *Cooperator* and transfer funds up to the amount of \$90,000.00 to accomplish the tasks identified in the attached Scope of Work.
2. Provide project support and participate in project update meetings.

XI. REPORTING REQUIREMENTS:

- A. The *Cooperator* will provide any reports specified in the attached Scope of Work according to the schedule specified therein.
- B. The draft final report is subject to a maximum ninety (90) day review, prior to submission of the final report. A final version of the report will not be considered final until the *Service* Project Manager formally acknowledges receipt and acceptance of the final report.
- C. Within 90 calendar days of completion of the project, the *Cooperator* will provide a final financial and performance report to the *Service* Project Manager that includes all of the information required above under A, and should also include the following information:
 1. A comparison of actual accomplishments with the established goals and objectives for the project.
 2. If applicable, reasons why established goals and objectives were not met.
 3. Other pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.
 4. Information on any real and personal property acquired with Federal funds or received from the Federal Government according to requirements of regulations referenced in the “Applicable Regulations” section of the agreement.

XII. INVOICING/ACCEPTANCE PROCEDURES:

- A. For reimbursement of costs, and/or advancement of funds, an invoice citing the *Service Agreement #113320J019* should be submitted, no more frequently than monthly, to the following address:

U.S. Fish and Wildlife Service
Anadromous Fish Restoration Program
Sacramento/San Joaquin Estuary
Fishery Resource Office
4001 N. Wilson Way
Stockton, California 95205-2486

- B. Interests earned on advances: *Grantee's* and *Sub-Grantee's* shall promptly, but at least quarterly, remit interest earned on advances to the *Service*. The *Cooperator* or *Sub-Grantee* may keep interest amounts up to \$250 per year for administrative expenses.
- C. All recipients not currently receiving funds electronically from the U.S. Department of the Interior or the U.S. Fish and Wildlife Service are responsible for completing a Standard Form 3881 (ACH) and forwarding it to the *Service* Project Manager. Forms are available from the *Service*.

XIII. MODIFICATION PROCEDURES:

Modifications to this Agreement may be proposed by either party and shall become effective upon written concurrence of all parties. Work completed prior to approval of a modification is done at the Recipient's risk, without expectation of reimbursement.

XIV. APPLICABLE OMB CIRCULARS:

- A. The recipient must submit with this agreement *Standard Form 424D (SF-424D) - Assurances Construction Programs*). In addition to the assurances listed on *SF-424D*, the recipient certifies compliance with the following regulations, as applicable, incorporated by reference with the same force and effect as if they were provided in full text. Failure of a recipient to comply with any provision may be the basis for withholding payments for proper charges made by the recipient and for termination of support.

1. OMB Circular A-102, Grants and Cooperative Agreements with State and Local Governments as codified at 43 CFR Part 12, Subpart C

2. OMB Circular A-110, Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations as codified at 43 CFR Part 12, Subpart F

3. OMB Circular A-21, Cost Principles for Educational Institutions
4. OMB Circular A-87, Cost Principles for State, Local, and Indian Tribal Governments
5. OMB Circular A-122, Cost Principles for Non-Profit Organizations
6. OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations
7. 43 CFR Part 12, Subpart D – Governmentwide Debarment and Suspension (Nonprocurement) and Governmentwide Requirements for Drug Free Workplace
8. 43 CFR Part 12, Subpart E – Buy American Requirements for Assistance Programs.
9. 43 CFR Part 18 – New Restrictions on Lobbying

Copies of the above documents are available at the following websites:

<http://www.whitehouse.gov/OMB/circulars/index.html> or www.doi.gov/pam/pamfaeg.html

B. Small Business Policy - Reference 505 DM 3.5 C(1)(a):

It is a National policy to award a fair share of contracts to small and minority business firms. The Interior is strongly committed to the objectives of this policy and encourages all recipients of its grants and cooperative agreements to take affirmative steps to ensure such fairness.

1. The grantee and subgrantee (leave as is per Contracting Office) shall take necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

2. Affirmative steps shall include:

(i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

(v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce as appropriate, and

(vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in (2)(I) through (v) above.

XV. SPECIAL PROVISIONS:

- A. **Seat Belt Policies and Programs:** Recipients of grants/cooperative agreements and/or sub-awards are encouraged to adopt and enforce on-the-job seat belt use policies and programs for their employees when operating company-owned, rented, or personally-owned vehicles. These measure include, but are not limited to, conducting education, awareness, and other appropriate programs for their employees about the importance of wearing seat belts and the consequences of not wearing them.
- B. Nothing herein shall be considered as obligating the *Service* to expend funds or otherwise obligate the *Service* for the future payment of money in excess of appropriations authorized by law and administratively allocated for the activities associated with *USFWS-AFRP* agreements.
- C. This Agreement may be terminated within ninety (90) days of written notification by either party.

XVI. COST SHARE

In the event the *Cooperator* fails to secure the cost share funds identified in its proposal, and as a result has less funds than the original project total, the *Cooperator* shall provide a report to the *Service* identifying the funding deficit and the potential impacts to the project scope of work, services, task orders, and budget. Based on the information provided, the *Service* has the option to amend or cancel the agreement. *Amendments to the agreement will follow standard agreement amendment procedures.*

XVII. ENVIRONMENTAL DOCUMENTATION

It is the *Cooperator's* responsibility to satisfy all local, state, and federal environmental laws and regulations (including CEQA and NEPA), and to obtain all necessary environmental and other permits, approvals, and documents. Upon request, the *Cooperator* must submit copies of all final

permits, documents, and approval necessary for the project prior to undertaking any work requiring such permits, documents, and approvals. If work is to take place on property not under the control of the *Cooperator*, then prior to proceeding with the work, the *Cooperator* shall provide advance written consent of the landowner to the *Service*.

XVIII. RIGHTS IN DATA

All data and information obtained and/or received under this agreement shall be in the public domain. The *Cooperator* shall have the right to disclose, disseminate and use, in whole or part, any final form of data and information received, collected and developed under this agreement, subject to inclusion of appropriate acknowledgment of credit to the *Service*, and if any, all other cost sharing partners for their financial support.

The *Cooperator* shall not sell or grant rights to a third party who intends to sell such product as a profit-making venture.

Use of draft data requires pre-approval by the *Service*.

XIX. RELATED ATTACHMENTS:

List Scope of Work or Scope of Services title as Attachment A followed by any other related attachments for the project.

FOR THE U.S. FISH AND WILDLIFE SERVICE:

Title: _____ Date: _____
Manager, CA/NV Operations Office

FWS PROJECT OFFICER - CONCURRENCE:

Title: _____ Date: _____
Martin A. Kjelson
Project Leader

FWS CONTRACT SUFFICIENCY REVIEW:

Title: _____ Date: _____
USFWS, Contracting Officer

FOR THE FISHERY FOUNDATION OF CALIFORNIA

Title: _____ Date: _____

For Cooperative/Grant Agreement #113320J019

ATTACHMENT A

SCOPE OF WORK

Title: Cosumnes River Salmonid Barrier Program

Watershed or geographic area: Cosumnes River

Watershed priority: no designation

Actions: The project will involve designing, contracting, and constructing: (1) Modifications to both fish ladders associated with the Granlees Diversion Dam so that they meet current California Department of Fish & Game (CDFG) hydraulic criteria for fish passage; (2) A flow barrier wall on the left bank of Granless dam to eliminate misdirecting attraction flows that occur at low to mid range flows; (3) Low flow fish passage structures (e.g., rock weirs or channels with flashboards) on two summer dam/low flow crossings that exist in the lower river. Also included is a three year post-project monitoring effort to evaluate the effectiveness of the new passage facilities in increasing access to spawning and rearing areas.

Location: All actions will occur along the mainstem of the Cosumnes River in Sacramento County. Granlees Diversion Dam is located in Rancho Murietta.

AFRP action priority: High

Objective: Improve access for adult salmonids to 7.2 miles of suitable spawning habitat upstream of Granlees Diversion Dam and connectivity between natal areas and rearing areas for juvenile salmonids in the mainstem of the Cosumnes River.

Description: The project will include the following tasks:

Task I - Baseline Monitoring/Bioassessment: The Fishery Foundation of California (FCC), The Nature Conservancy (TNC), and CDFG 's Stream Evaluation Program (STEP) completed initial baseline monitoring in 1998 and 1999.

Task II - Permitting and Environmental Documentation:
CDFG has agreed to act as the CEQA lead agency. U. S. Fish & Wildlife Service (USFWS) is being consulted for the NEPA lead agency. Various permitting will be contracted out to the appropriate consulting agency.

Task III - Engineering

Granlees Diversion Dam fish ladder improvement project and the summer dam/low flow crossing designs will be contracted out with instructions to attain the most beneficial end product with the requested funding. Engineering designs will be developed in consultation with CDFG and National Marine Fisheries Service (NMFS) engineers familiar with salmonid passage. Three designs, one primary and two alternate, will be formulated with the intent that all involved parties will be able to review them and chose which design will most fully address the technical, biological, and functional needs. Final design will be chosen with a consensus of stakeholders based upon these criteria. Applications for required State and federal permits would be completed based on final engineering designs. This Task will occur from October 1998 - January

1999.

Task IV - Construction of Fish Ladders - Granless Diversion Dam:

Fish ladder construction is scheduled to begin in July of 2001 through October of 2001.

Construction may continue into July - October of 2002 if unforeseen circumstances arise during the initial construction period.

Task V - Construction:

Construction on fish barrier improvements will begin in August 2000, with completion by October 15, 2000. Each individual project can stand alone in construction and design (see Budget for individual costs) and no two projects are inseparable but it is recommended that all projects be funded to receive the greatest benefit to the salmonid resource of the Cosumnes River.

Task VI - Post Project Monitoring

Post Project Monitoring will begin during the fall following project completion and will continue for three consecutive years at an average cost of \$16,659 per year.

Task VII - Monitoring:

Monitoring consisting of spawning surveys, outmigrant monitoring, and rearing will begin in the Fall immediately following the award of funding, and continue through the end of the outmigration period (mid May). Monitoring will be done under the supervision of CDFG stream evaluation group who will record and analyze data for future reporting. Monitoring under this grant will be conducted during the years 2000 - 2002. It will continue beyond 2002 if additional funding can be acquired.

Background: The Cosumnes River, the last un-dammed river running from the eastern slopes of the Sierra Nevada into the Sacramento/San Joaquin Delta, supports a rich aquatic ecosystem. Of all of the Delta tributaries, it alone has escaped major water development and therefore has retained a relatively natural flow pattern and accompanying sediment and nutrient transport process. It is these qualities that make the Cosumnes a prime river for restoration and give it the potential to become a model for future river restoration efforts within the basin.

The Cosumnes River possesses a rain-dominated watershed with the majority of flow occurring as direct runoff. With little snowmelt to augment fall flows, the river between Highway 16 and Twin Cities Road often dries up or has flows unsuitable for upstream migration. The Cosumnes River historically supported thousands of fall-run Chinook salmon. This run has been diminished to only a few hundred spawning individuals because of habitat degradation, the loss of fall attraction flows, and barriers to migration.

The Cosumnes River possesses four potential migration barriers within or below the suitable spawning area. Three concrete summer dams/low flow crossings occur in the lower river, well below the spawning area. It has been concluded that these crossings are low flow barriers to upstream migration and act as a migration bottleneck in normal to low-flow years sometimes

resulting in no salmon or steelhead spawning in the river. Rancho Murrieta Community Service District (RMCS D) operates a small diversion dam on the Cosumnes River. The dam has two fish ladders, which are functional during above average rainfall years. However, the ladders are both in excess of 70 years old and in a state of disrepair, possessing broken sections and significant filling of coarse sediment. An informal inspection by George Heise of CDFG in June of 1998 suggests the following deficiencies: 1) Excessive jump heights in all pools; 2) Inadequate dimensions in resting pools; 3) Substandard entrance pool for wide range of flows; 4) High risk of salmon spilling back into the basin upon exiting the ladders due to poorly placed spillway; 5) Inadequate wall height increasing the risk of larger fish jumping out of resting pools; and, 6) Misleading attraction flows on opposite side of basin.

The proposed project will modify the existing fish ladders at Granlees Diversion Dam to bring them up to current CDFG hydraulic criteria for fish passage and significantly increase their durability so that they can withstand a wide range of hydro logic conditions. The summer dams will be retrofitted with low-flow passage structures to allow for fish passage over a greater range of flows. These actions will essentially eliminate barriers to fish passage on the Cosumnes River and mark the beginning of the recovery of sustained runs of fall-run Chinook in the watershed.

Justification: The Cosumnes River is an Eastside Delta tributary that supports fall-run chinook salmon. This run is currently at reduced levels compared to the 1967 - 1991 reference period used by the Anadromous Fish Restoration Program (AFRP) (USFWS 1995). Poor access to suitable spawning habitat has been identified as an important factor contributing to limited salmon production in the river. This project supports AFRP recommended actions designed to restore and increase available spawning habitat for salmonids. Both are considered high priority actions.

Monitoring Needs: Monitoring will be conducted before and after the barriers are modified to determine spatial and temporal spawning distribution, flows and temperatures required for upstream migration, spawning success and the quality, quantity and distribution of spawning habitat. Monitoring will be conducted in cooperation with CDFG - STEP; which is currently evaluating salmon population and habitat conditions within the Cosumnes River to identify management options that could improve habitat and increase salmon production. Monitoring will include habitat mapping and salmon spawning distribution using aerial photography, spawning distribution and spawner abundance using salmon carcass surveys, estimation of a salmon production index using downstream migrant traps, evaluation of salmon rearing habitat, and an evaluation of habitat conditions (flow, temperature, channel attributes, etc.).

The value of the monitoring data will extend beyond the boundaries of the fish passage project to various other present and future projects within the watershed. It is very possible with good supporting biological information that flood control projects near the spawning zone could be configured to improve salmon habitat.

Predicted Biological Benefits: The proposed project will directly and significantly benefit East side delta tributary fall run Chinook salmon and steelhead trout, both of which can be considered

high risk species within the Cosumnes River. By eliminating barriers to upstream migration, the proposed project will grant these two priority species access to critical instream aquatic habitat higher in the watershed. The elimination of the low flow barriers created by the summer dam/ low flow crossings will grant salmon and steelhead access to upper watershed spawning grounds earlier in the year and under lower flows than has occurred in the past and will result in reduced straying, enhanced spawning readiness, run timing and juvenile outmigrant survival. The projected benefit of the project will be long-term contributing to consistently increased run strength.

The project will provide multiple benefits to chinook salmon including a reduction in migration delays, reduced predation, enhanced spawning success, and will provide further habitat and population diversity to a depleted salmon resource, incrementally benefitting chinook salmon throughout the Sacramento-San Joaquin system. The aforementioned attributes will compliment TNC's work to create shallow water juvenile fish rearing habitat in the rivers lower floodplain.

The proposed improvements to fish passage at the existing barriers are consistent with the high priority ranking given to fish passage facilities in the AFRP Revised Draft Restoration Plan. The proposed project will significantly benefit steelhead, which has been listed as a threatened species under the Federal Endangered Species Act, and fall-run Chinook salmon which have been proposed for listing by NMFS. The proposed project is consistent with both CALFED priorities and objectives and with actions designed to promote recovery and protection for both salmon and steelhead populations.

Issues: The proposed project will involve heavy construction within the bankfull boundaries of the stream and will require normal county permitting and inspection process associated with improvements to property. All construction will be conducted during the summer base flow period during which most of the affected area of the Cosumnes River will be dry. This will allow construction to occur with a minimal effect on the aquatic resources of the Cosumnes River. A streambed alteration permit will be obtained from CDFG Region 2. Corps of Engineers approvals, Regional Water Quality Control Board water quality waiver or certification, and an historical waiver will be required. Endangered Species Act, clean water act, CEQA, and NEPA compliance will also be required. No significant environmental effects are expected to arise as a result of the proposed project. The permitting process will begin pending acquisition of funding.

Negotiations are in progress with the various land owners on the affected properties. RMCS D has pledged support for the proposed retrofit to the fish ladders on Granlees Dam and is awaiting board approval for an official agreement. Richard Becker, owner of the land adjacent to the second summer dam (RM 16.1) has pledged support to the project and has granted access to the site for construction purposes. TNC owns an easement on the property adjacent to the low flow crossing (RM 6.7) and will assist in the process of negotiating with the land owners for project approval.

Involved Parties: The Fishery Foundation of California.

Environmental Documentation: see Task II above.

Deliverables: Project deliverables will include two annual progress reports and a final project report. Each report would be due at the end of each federal fiscal year. Electronic copies of all data collected in support of this project will be provided if requested.

Cost and Schedule:

a. Budget Costs

Fish Ladders

Project Phase and Task	Direct Labor Hrs.	Direct Salary/ Benefits	Overhead Labor	Service Contracts	Material/ Acquisition Contracts	Misc/ Other Direct Costs	Total Cost
Task IV Construction		8,131	813	105,346	8,187	15,802	138,279
a. Fish Ladders	417	8,131	813	105,346	8,187	15,802	138,279
Task V Post Project Monitoring	668/yr for 3 years	40,109	3,967	0	4,900	1,000	49,976
Total Cost		48,240	4,780	105,346	13,087	16,802	188,255
AFRP Cost		24,120	2,390	52,673	6,543	4,274	90,000
Four Pumps Cost		24,120	2,390	52,673	6,544	12,528	98,255

In addition, the Fishery Foundation of California will provide in kind services to the proposed project. Hanson Environmental, Inc., will also provide professional consulting services, at no cost to the project, to assist with the project design and development, implementation of a monitoring and evaluation program, peer review of annual reports, and participation as a scientific advisor to the project.

b. Schedule Milestones

Task I:	Baseline Monitoring/Bioassessment	1998 and 1999
Task II:	Permits Obtained	March 2000
Task III:	Engineering Design Completed Project Plans Complete	May 2000
Task IV:	Construction of Low Flow crossings	August - October 2000

Construction of Granless Dam

July - October 2001

Task V: Post Project Monitoring

2000 - 2002

Sources of Information:

CDFG. 1957. Annual spawning reports.

USFWS. 1995. Working paper on restoration needs, Volume 3. Washington, D.C.,
Department of Interior.